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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,850	12/12/2003	John Charles Calhoun	003797.00691	9029

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EXAMINER

BERHANU, SAMUEL

ART UNIT	PAPER NUMBER
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2838

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/733,850

Applicant(s)

CALHOON ET AL.

Examiner

Samuel Berhanu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 and 28-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 and 28-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-5 and 7-8 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stephens (US 5,734,254) in view of Gosior et al. (US 2002/0159434).

Regarding Claim 1, Stephens discloses in Figures 1 and 2 an apparatus (40) for transmitting inductive energy to a power adapter (10) in proximity thereof the power adapter assembly including a microprocessor (20) for processing data relevant to the inductive energy, the apparatus comprising: a memory (50) for storing computer readable instructions relevant to providing inductive energy to the power adapter; a processor unit (50) operatively coupled to the memory; and a transmission element (62) operatively coupled to the processor unit so as to provide the Inductive energy to the power adapter; and a housing (10) for enclosing the memory and processor unit therein (Column 1, lines 53-67, Column 2, lines 1-10). Stephens does not disclose explicitly, inductive data communications to the power adapter based on a polling message having a header and a payload. However, Gosior et al. disclose in Figure 8, data communications to the battery pack based on a polling message having a data

communications to the battery pack based on a polling message having a header and a payload (Paragraphs 0122). It would have been obvious to a person having ordinary skill in the art at the time of the invention to use a polling message that contains a payload, and a header as taught by Gosior et al. in Stephens charging system in order to provide an efficient and reliable data transfer means for the charger and the device or the battery pack.

Regarding Claim 3, Stephens discloses a communications device for receiving and transmitting data (20,50) and the communications device being operatively coupled to the transmission element (24,54)

Regarding Claim 4, Stephens discloses an antenna and a communications device configured to receive (24,54) the computer readable instructions and configured to transmit (24,54) the instructions to the antenna for wireless data communications to a power adapter (Column 3, lines 41-49).

Regarding Claim 5, Stephens discloses a processor unit (50) is configured to receive a plurality of power parameters from the power adapter. (Column 3, lines 59-67, column 4, lines 1-6).

Regarding Claim 7, Stephens discloses a plurality of transmission elements (24,32,38) responsive to receiving a power adapter.

Regarding Claim 8, Stephens discloses in Figure 3, an apparatus configured for receiving inductive energy, comprising: a memory for storing computer readable data (295) relevant to receiving the inductive energy; a processor unit (295) for processing the computer readable data and for processing data communications with a computer

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system; a coil configured for receiving the inductive energy (283) and for receiving inductive data, said data having a header and a payload; a power supply (284) configured to output a direct current (DC) responsive to the inductive energy ; and a housing (10) for enclosing the memory and processor unit therein (Column 1, lines 53-67, Column 2, lines 1-10, Column 5, lines 1-27). Stephens does not disclose explicitly, and for receiving inductive data, said data having a header and a payload; However, Gosior et al. disclose in Figure 8, data communications to the battery pack based on a polling message having a data communications to the battery pack based on a polling message having a header and a payload (Paragraphs 0122). It would have been obvious to a person having ordinary skill in the art at the time of the invention to use a polling message that contains a payload, and a header as taught by Gosior et al. in Stephens charging system in order to provide an efficient and reliable data transfer means for the charger and the device or the battery pack.

Regarding Claim 10, Stephens discloses the apparatus, comprising a communications device (20) operatively coupled to the pickup coil (32).

Regarding Claim 11, Stephens discloses the apparatus, in which the communications device (20) is configured to receive the computer readable data and transmit the data to the pick up coil (32).

3. Claims 2, 6, 9, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stephens (US 5,734,254) in view of Gosior et al. (US 2002/0159434) as applied to claims 1 and 8 above, and further in view of Stobbe (US 6,275,143).

Regarding Claim 2, neither Stephens nor Gosior et al. disclose, the apparatus in which the memory includes authentication data for authenticating the power adapter for the inductive energy transmission. However Stobbe discloses the apparatus in which the memory includes authentication data for authenticating the power adapter for the inductive energy transmission (Column 6, lines 5-20). It would have been obvious to a person having ordinary skill in the art at the time of the invention to implement authentication data transfer means in Stephens battery pack and adapter system as taught by Stobbe in order to protect against unintentional or unwanted battery charging.

Regarding Claims 6 and 13, neither Stephens nor Gosior et al. disclose, a processor unit is Configured to receive a digital security certificate from a power adapter. Stobbe discloses a processor unit (18) is Configured to receive a digital security certificate from a power adapter (Column 6, lines 5-20). However, Stobbe discloses a processor unit (18) is Configured to receive a digital security certificate from a power adapter (Column 6, lines 5-20). It would have been obvious to a person having ordinary skill in the art at the time of the invention to implement authentication data transfer means in Stephens wireless battery charging system as taught by Stobbe in order to protect against unintentional or unwanted battery charging.

Regarding Claim 9, neither Stephens nor Gosior et al. disclose, the processor unit is configured to provide authentication data for inductive energy reception. However, Stobbe discloses except the processor unit is configured to provide authentication data for inductive energy reception (Column 6, lines 5-20). It would have been obvious to a person having ordinary skill in the art at the time of the invention to

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implement authentication data transfer means in Stephens battery pack and adapter system as taught by Stobbe in order to protect against unintentional or unwanted battery charging.

Regarding Claim 15, Stobbe discloses an antenna (52) and a communications device (22,24) configured to receive the computer readable data and configured to transmit the data to the antenna for wireless data communications a charging source (Column 5, lines 35-45).

4. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stephens (US 5,734,254) in view of Gosior et al. (US 2002/0159434) as applied to Claim 8 above, and further in view of Garcia et al. (US 5,963,012).

Regarding Claim 12, neither Stephens nor Gosior et al. disclose, the processor unit is configured to provide a plurality of power parameters to a power source, which provides the inductive energy. However, Garcia et al. disclose except the processor unit is configured to provide a plurality of power parameters to a power source which provides the inductive energy. It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify Stephen's battery pack and adapter system in order to transmit battery parameters as taught by Garcia et al. so that the device can make any necessary charging adjustments.

5. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stephens (US 5,734,254) in view of Gosior et al. (US 2002/0159434) as applied to Claim 8 above, and further in view of Higuchi et al. (US 6,163,132).

Regarding Claim 14, neither Stephens nor Gosior et al. disclose the processor unit is configured to send data to the computer system so as to indicate it is receiving inductive energy. However, Higuchi discloses in Figure 1 the processor unit (4b) is configured to send data to the computer system (5) so as to indicate it is receiving inductive energy (Column 4, lines 33-38). It would have been obvious to a person having ordinary skill in the art at the time of the invention to add a computing and indicating system in Stephens battery pack apparatus as taught by Higuchi et al. in order to monitor battery status.

6. Claims 8, 16, 22 and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lyon (US 2004/0145342) in view of Gosior et al. (US 002/0159434)

Regarding Claim 8, Lyon discloses in figures 1 and 2, an apparatus configured for receiving inductive energy, comprising: a memory for storing computer readable data (295) relevant to receiving the inductive energy; a processor unit (240) for processing the computer readable data and for processing data communications with a computer system; a coil configured for receiving the inductive energy (232) and for receiving inductive data, said data having a header and a payload; a power supply (230) configured to output a direct current (DC) responsive to the inductive energy ; and a housing (noted that the processor and the memory are enclosed in the housing as shown in figures 1 and 2) for enclosing the memory and processor unit therein (Paragraphs 0023, 0032, 0033). Lyon does not disclose explicitly, and for receiving inductive data, said data having a header and a payload; However, Gosior et al. disclose in Figure 8, data communications to the battery pack based on a polling

message having a data communications to the battery pack based on a polling message having a header and a payload (Paragraphs 0122). It would have been obvious to a person having ordinary skill in the art at the time of the invention to use a polling message that contains a payload, and a header as taught by Gosior et al. in Lyon's adaptive charger system and method in order to provide an efficient and reliable data transfer means for the charger and the device or the battery pack.

Regarding Claims 16 and 22, Lyon discloses in Figure 2, a computer implemented method of providing inductive energy to a power adapter, comprising the step of; in a transmission element (210 to 212): wirelessly (inductive power and data signals) receiving a polling message (receiving a command) from a source (Paragraph 0025) in which said polling message is provided, the polling message including a data structure having a header and a payload, transmitting a request for (Paragraph 0027, 0029, 0032, 0033) power to the source via said transmission element (communication link, either the inductive coil or elements 243 and 242); and receiving power from the source via said transmission element responsive to transmitted request (noted that the inductive coil serves as a data and a power communication means, see paragraph 0023). Lyon does not disclose the polling message including a data structure having a header and a payload. However, Gosior et al. disclose in Figure 8, data communications to the battery pack based on a polling message having a data communications to the battery pack based on a polling message having a header and a payload (Paragraphs 0122). It would have been obvious to a person having ordinary skill in the art at the time of the invention to use a polling message that contains a

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payload, and a header as taught by Gosior et al. in Lyon's adaptive charger system and method in order to provide an efficient and reliable data transfer means for the charger and the device or the battery pack.

Regarding Claim 28, Lyon discloses in Figures 1 and 2, wherein the payload includes at least one of an operating parameter and authentication information (Paragraphs 0033).

Regarding Claim 29, Lyon discloses wherein the operating parameter corresponds to a charging voltage or a maximum expected power consumption (Paragraphs 0033).

Regarding claim 30, Lyon discloses in Figures 1 and 2, the payload contains specific data (data relevant to the device or for charging steps) relevant to the power consumption (paragraph 0033)

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7. Claim 16, 17, 19 and 22 –23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia et al. (US 5,963,012) in view of Gosior et al. (US 002/0159434)

Regarding Claims 16 and 22, Garcia et al disclose in Figures 2 and 3 a computer implemented method of providing inductive energy to a power adapter, comprising the step of: in a transmission element wirelessly receiving a polling message from a source (Column 2, lines 47-59); transmitting a request for power to the source via said transmission element (204); and receiving inductive power from the source via said transmission element responsive to the transmitted request. (Noted that the

transmission element responsive to the transmitted request. (Noted that the receiving and the transmitting devices exchange data via a wireless communication means, when data is verified electrical action such as charging or providing energy executes). Garcia et al. do not disclose explicitly, the polling message including a data structure having a header and a payload. However, Gosior et al. disclose in Figure 8, the polling message including a data structure having a header and a payload (0122). It would have been obvious to a person having ordinary skill in the art at the time of the invention to use a polling message that contains a payload, and a header as taught by Gosior et al. in Garcia et al. wireless battery charging system in order to provide an efficient and reliable data transfer means for the charger and the device or the battery pack.

Regarding Claims 17 and 23, Garcia et al. disclose the step of transmitting includes a step of transmitting power parameters to the source (column 2, lines 47-59).

Regarding Claim 19, Garcia et al. disclose, a step of initiating a charger responsive to the step of receiving (Column 2, lines 30-59).

8. Claims 18, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia et al. (US 5,963,012) in view of Gosior et al. (US 002/0159434) as applied to Claims 16 and 22 above, and further in view of Stobbe (US 6,275,143).

Regarding Claims 18, 24 and 25, neither Garcia et al. nor Gosior et al. the step of transmitting includes a step of transmitting authenticating data to the source. However, Stobbe discloses the step of transmitting includes a step of transmitting authenticating data to the source. It would have been obvious to a person having ordinary skill in the art at the time of the invention to implement authentication data

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transfer means in Garcia et al. wireless battery charging system as taught by Stobbe in order to protect against unintentional or unwanted battery charging.

9. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia et al. (US 5,963,012) in view of Gosior et al. (US 002/0159434) as applied to Claims 16 and 22 above, and further in view of Parks et al. (US 5,455,466).

Regarding Claim 19, neither Garcia et al. nor Gosior et al. disclose a step of converting the inductive power to a direct current responsive to the step of receiving. However, Parks et al. disclose in Figure 1 a step of initiating a step of converting the inductive power to a direct current responsive to the step of receiving (Column 2, lines 35-50). It would have been obvious to a person having ordinary skill in the art at the time of the invention to add a charging rectifier circuit in Garcia et al wireless battery charging system as taught by Parks et al. in order to supply direct current appropriate for charging the battery pack.

10. Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia et al. (US 5,963,012) in view of Gosior et al. (US 002/0159434) as applied to Claims 16 above, and further in view of Higuchi et al. (US 6,163,132).

Regarding Claim 20, neither Garcia et al. nor Gosior et al. disclose a step of transmitting data to a computer system for indicating the step of receiving inductive power. However, Higuchi et al disclose in Figures 1 and 2 a step of transmitting data to a computer system for indicating the step of receiving inductive power (Column 4, lines 33-38). It would have been obvious to a person having ordinary skill in the art at the

time of the invention to add a computing and indicating system to the battery pack in Garcia et al. as taught by Higuchi et al. in order to monitor battery status.

Regarding Claim 21, neither Garcia et al. nor Gosior et al. disclose, in Figure 3 a step of displaying an object on a graphical user interface (6) indicative of the step of receiving (Column 4, lines 60-63).

Response to Arguments

11. Applicant's arguments filed 2/01/06 have been fully considered but they are not persuasive, or moot in view of the new ground(s) of rejection.

Applicant argues that Stephens does not teach or suggest a direct current powered by the inductive energy and relevant to the inductive data. This is not correct.

Stephens discloses in Figures 1-3 that a power supply (284) configured to output a direct current (DC) responsive to the inductive energy and relevant to the inductive data. And also element 30 and 230, in figures 1 and 2 respectively, are arranged to output AC/DC Current (Column 3, lines 17-20, Column 5, lines 10-19)

Regarding applicants Claim 7 arguments, Claim 7 does not have the alleged elements argued such as " a plurality of transmission elements responsive to a power adapter, the transmission elements being coupled to the processor unit and providing inductive energy to a power adapter" Thus, the argument is irrelevant or not material. That is, Claim 1 requires only one transmission element so coupled).


KARL EASTHOM
SUPERVISORY PATENT EXAMINER

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel Berhanu whose telephone number is 571-272-8430. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Karl Easthom can be reached on 571-272-1989. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SB


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SUPERVISORY PATENT EXAMINER